REMARKS

Reconsideration and allowance of the subject patent application are respectfully requested.

Claims 1-4, 7, 10, 11, 13-27 and 29 were rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Takaya (JP 11-065791) in view of Suzuki (U.S. Patent No. 6,549,947). For the reasons set forth below, Applicants traverse this rejection.

Takaya[1] discloses a printing processor 1 having a central processing unit 12 which judges whether sufficient memory is available for a print job. If not, the print job is transferred to another printing processor. As acknowledged in the office action, this document contains no disclosure whatsoever of, among other things, disconnecting from a communication path to a transmission side when there is a memory overflow condition and subsequently automatically calling the transmission side. In addition, because Takaya sends a print job to a different printing processor if insufficient memory is available, Applicants submit that there was no reason for Takaya to provide the feature of, for example, automatically calling back a transmission side, nor would there be any motivation to modify Takaya to provide such a feature.

Suzuki relates to a printer driver for host computer and does not remedy the deficiencies of Takaya. With respect to claim 1, Suzuki, like Takaya, does not disclose, among other things, disconnecting the communication apparatus from a communication path to a transmission side when an overflow condition of a memory is reached and then automatically calling the transmission side when the memory recovers from the overflow condition. Thus, even assuming Suzuki were forcedly combined with Takaya, the subject matter of claim 1 would not result.

More specifically, the communication apparatus of Suzuki that receives data is expressly characterized by Suzuki as a "dumb printer." There is no functionality ascribed to this "dumb printer" of disconnecting from the host computer when its memory

[1] The translation of Takaya provided with the office action is a computer translation and expressly includes a disclaimer that "...the translation may not reflect the original precisely." Consequently, Applicants do not concede that the translation is accurate.

overflows. Indeed, Suzuki contains a detailed description of how it is the printer driver of the host computer that interrogates the dumb printer to determine how much memory is available and then sends data if sufficient memory is available:

> Upon receipt of the band transmission declaration, the printer 3 compares the size of the band included in the declaration (i.e., the size of band data which are to be transmitted now) with the memory available in the receiving buffer. If the available memory is smaller than the band data, the printer 3 sends back, to the printer monitor 9, a reply including a printer status which represents that the receiving buffer is full. On the basis of the reply, the print monitor 9 determines whether or not the buffer is full (S26). If the buffer is full, the status request is sent to the printer 3 at regular time intervals and the print monitor 9 receives from the same replies responding to the requests (S27), thus determining whether or not the receiving buffer is released from a full state (i.e., the available memory of the receiving buffer becomes greater than the size of next band data which are to be transmitted now) (S26) (see FIG. 8). Suzuki, col. 10, lines 46-63.

There is no disclosure whatsoever in Suzuki of the "dumb printer" disconnecting itself from a communication path to a transmission side in a memory overflow condition and then automatically calling the transmission side when the memory recovers. Instead, Suzuki teaches that the transmission side monitors the free memory in the printer and sends data only when there is sufficient available memory to do so. Consequently, even assuming for the sake of argument that sufficient motivation were identified for combining Suzuki with Takaya, the subject matter of claim 1 could never result.

Applicants note the references on page 3 of the office action to col. 17, lines 35-44 and lines 45-48 of Suzuki in connection with "suspending" and "resuming" transmission. However, these portions of the Suzuki claims clearly and unambiguously refer to the "data transmission means" (*e.g.*, the host computer) suspending and resuming transmission to the dumb printer, not to the dumb printer disconnecting itself from the host computer and then automatically calling the host computer.

For at least these reasons, the proposed combination of Takaya and Suzuki does not render the subject matter of claim 1 obvious.

Claims 2, 3, 4 and 11 depend from claim 1 and are believed to be allowable because of their respective dependencies and because of the additional patentable features contained therein.

The communication apparatuses of claim 7 includes control means for, *inter alia*, controlling so that, when a memory means reaches an overflow condition during data reception, the data reception is interrupted. Neither Takaya nor Suzuki discloses a communication apparatus having a control means for controlling so data reception is interrupted when there is a memory overflow condition. In particular, as noted above, Suzuki discloses a dumb printer to which data is sent only when there is sufficient memory to do so. Suzuki's dumb printer does not include control means for interrupting data reception as claimed and thus the proposed combination of Takaya and Suzuki does not render claim 7 obvious.

Claim 7 further specifies that when data reception is restarted, the data stored in the memory means by the data reception is compared with data already stored in the memory means, and data except for the data portion already printed on the recording sheet is printed on a recording sheet by a printing means. No such operation is described in either Takaya or Suzuki.

The office action references col. 3, lines 51-63 of Suzuki in connection with this feature. However, this portion of Suzuki merely describes that the print data for a page can be retained in the host computer in case it becomes necessary to re-send the print data to the printer. There is disclosure or suggestion here of any comparison carried out by the printer (or anything else) between received data and stored data, nor is such a comparison in any way inherent. For this additional and independent reason, the proposed combination of Takaya and Suzuki fails to render claim 7 obvious.

Claims 10 and 13 depend from claim 7 and are believed to be allowable because of their respective dependencies and because of the additional patentable features contained therein.

Claim 14 is directed to a communication apparatus that includes a controller wherein, when the controller detects a memory overflow condition during the retrieving of the data from a server, the connection to the server is broken such that the data is

retained by the server and, when the controller detects that the memory overflow condition is resolved, the controller automatically attempts to re-connect to the server and, if a connection is made, retrieves the data. As discussed in detail above, neither Takaya nor Suzuki discloses or suggests a communication apparatus including a controller that, among other things, attempts to re-connect to a server when a memory overflow condition is resolved. Consequently, the proposed combination of these documents does not render claim 14 obvious.

Claims 15-22 depend from claim 14 and are believed to be allowable because of their respective dependencies and because of the additional patentable features contained therein.

Claim 23 is directed to a communication apparatus that selectively retrieves data from a server and includes a controller wherein, when a memory overflow condition is detected during the retrieving of the data, the connection is broken such that the data is retained by the server and, when the controller detects that the memory overflow condition is resolved, the controller automatically attempts to re-connect to the server and, if a connection is made, retrieves the data and controls a printer to print only pages not previously printed. As discussed in detail above, neither Takaya nor Suzuki discloses or suggests a communication apparatus including a controller that, among other things, attempts to re-connect to a server when a memory overflow condition is resolved. Consequently, the proposed combination of these documents does not render claim 23 obvious.

Claims 24-27 and 29 depend from claim 23 and are believed to be allowable because of their respective dependencies and because of the additional patentable features contained therein.

Claims 5, 6, 8, 9, and 12 were rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over the proposed Takaya-Suzuki combination, in further view of Kadota *et al.* (U.S. Patent Application Publication No. 2001/0043723). Kadota *et al.* is cited for its purported alleged disclosure of erasing data which has not been printed. However, in Kadota *et al.*, the host computer sends an instruction to the printer to clear the memory if a print error occurs. This is different than the control means of claim 5

which erases when data reception is interrupted and certain data has not been printed. In addition, Kadota *et al.* does not remedy the deficiencies of the proposed Takaya-Suzuki combination with respect to, for example, a control means for controlling so that data reception is interrupted when a memory overflow occurs as specified in claim 5. For all these reasons, the proposed combination of Takaya, Suzuki and Kadota *et al.* does not render the subject matter of claim 5 obvious.

Claims 6, 8, 9 and 12 depend from claim 5 and are believed to be allowable because of their respective dependencies and because of the additional patentable features contained therein.

Claim 28 was rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over the proposed Takaya-Suzuki combination, in further view of Kadota *et al.* Among other things, Kadota *et al.* does not remedy the deficiencies of the proposed Takaya-Suzuki combination with respect to, for example, the controller of claim 23, from which claim 28 depends. As such, the proposed combination of Takaya, Suzuki and Kadota *et al.* does not render the subject matter of claim 28 obvious.

The pending claims are believed to be allowable and favorable office action is respectfully requested.

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